UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,131	08/31/2001	Robert Tischer	145547.00000	2130

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EXAMINER
SCHLAIFER, JONATHAN D

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/944,131	TISCHER, ROBERT
	Examiner	Art Unit	
	Jonathan D. Schlaifer	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 August 2001*.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-26* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on *31 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.
   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a)☐ All b)☐ Some * c)☐ None of:
   1.☐ Certified copies of the priority documents have been received.
   2.☐ Certified copies of the priority documents have been received in Application No. _____.
   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1)☒ Notice of References Cited (PTO-892) *
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date *8/31/01*.
4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

U.S. Patent and Trademark Office
PTOL-326 (Rev. 1-04)   Office Action Summary   Part of Paper No./Mail Date 20041020

DETAILED ACTION

1. This action is responsive to application 09/944,131 filed on 08/31/2001, with prior art

   filed on 8/31/2004.

2. Claims 1-26 are pending in the case. Claims 1, 19, and 23 are independent claims.

Information Disclosure Statement

3. The information disclosure statement filed 8/31/2004 fails to comply with 37 CFR

   1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each

   publication or that portion which caused it to be listed; and all other information or that

   portion which caused it to be listed. None of the Non-Patent Literature was available to

   the examiner, so none was considered, and in order to provide consideration the applicant

   is suggested to provide another copy of these references. It has been placed in the

   application file, but the information referred to therein has not been considered.

Claim Objections

4. Claims 15, 19 and 23 objected to because of the following informalities: Numbers are

   used to refer to subparts of the claims, which may cause confusion with the claim

   numbering. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
such that the subject matter as a whole would have been obvious at the time the invention was made to a person
having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
manner in which the invention was made.

5. **Claims 1-2, 8-9, and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakao (USPN 6,061,697—filing date 8/25/1997), further in view of Glowny (USPN 5,805,897—filing date 6/9/1995).**

6. **Regarding independent claim 1,** Nakao discloses a system for producing a distributed document having an ordered compilation of information (in the Abstract lines 1-10, Nakao discloses a distributed document accessing basis), the system comprising multiple fragment editor executables that function cooperatively as one implemented document type declaration (DTD) (in the Abstract lines 1-20, Nakao discloses that a DTD is managed). Nakao further discloses the system allowing multiple authors to edit the distributed document contemporaneously while allowing each of the multiple authors to view edits made by others of the multiple authors (see Nakao col. 5, lines 5-25). Nakao fails to disclose that said multiple fragment editor executables are distributed among multiple sites of a computer network and operate in a peer-to-peer environment without need for a central server. However, Glowny discloses the advantages of a peer-to-peer network over a centralized network as in Nakao in col. 4, line 60—col. 5, line 10. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a peer-to-peer network as in Glowny in combination with Nakao's invention because it would provide "flexibility without the cost and risks of a single server" (Glowny, col. 5, lines 1-2).

7. **Regarding dependent claim 2,** Nakao fails to disclose that replicates of the complete document reside at the multiple sites of the computer network. Glowny does not disclose this explicitly, but it it was notoriously well known in the art at the time of the invention

that it is common practice in a peer-to-peer network to back up documents at multiple

points along the network to increase the reliability of the document storage.

8. **Regarding dependent claim** 8, Nakao and Glowny fail to disclose that the replicates

reside in computer memory at the multiple sites of the computer network. However, it

was notoriously well known in the art at the time of the invention that when data resides

in a machine it must reside in some kind of memory or else it cannot be stored. It would

have been obvious to one of ordinary skill in the art at the time of the invention to have

the replicates reside in memory so that they can be stored.

9. **Regarding dependent claim 9,** Nakao and Glowny fail to disclose that the replicates are

persisted by writing to computer hard disks at the multiple sites of the computer network.

However, it was notoriously well known in the art at the time of the invention that hard

disks are a common means of persisting data because they are a cheap, fast means of

persistent storage. It would have been obvious to one of ordinary skill in the art at the

time of the invention to use hard disks to persist data in Nakao and Glowny because they

are a cheap, fast means of persistent storage.

10. **Regarding dependent claim 13,** Nakao, in the Abstract, lines 1-30, discloses that the

document on which the ordered compilation occurs is an SGML document.

11. **Regarding dependent claim 14,** Nakao and Glowny fails to disclose that the ordered

compilation is an SGML document selected from the group consisting of XML and

HTML. However, it was notoriously well known in the art at the time of the invention

that XML and HTML were specific types of SGML documents which saw especially

common use because they were useful as data encoding and web page documents and it

would have been obvious to one of ordinary skill in the art at the time of the invention to

have the SGML documents be XML or HTML documents so that they could serve as

data encoding or web page documents.

12. **Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakao,**

further in view of Glowny, further in view of Appleman et al. (USPN 5,918,010—

filing date 2/6/1998), hereinafter Appleman.

13. **Regarding dependent claim 3,** Nakao and Glowny fail to disclose that an edit made by

any one of the multiple authors is propagated among the replicates residing at the

multiple sites of the computer network. However, Appleman discloses in col. 9, lines 10-

30, propagating edits. It would have been obvious to one of ordinary skill in the art at the

time of the invention to propagate edits in the manner of Appleman in the context of

Nakao and Glowny because as Appleman says in col. 9, line 30, it "greatly [increases]

design and maintenance flexibility".

14. **Regarding dependent claim 4,** Nakao and Glowny fail to wherein an edit made by any

one of the multiple authors is immediately propagated among the replicates residing at

the multiple sites of the computer network. However, Appleman implies that this would

be the case for the edit propagation in the device because there is no delay mentioned and

it was notoriously well known in the art at the time of the invention that unless there is a

specific reason to delay performing a task, it should be performed immediately for the

sake of efficiency. It would have been obvious to one of ordinary skill in the art at the

time of the invention to perform the propagation immediately because there is no reason

provided in Appleman to delay and as a result it would be most efficient to propagate

immediately.

15. **Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakao,
further in view of Glowny, further in view of Appleman, further in view of Yablon
(USPN 5,764,731—filing date 1/26/1995).**

16. **Regarding dependent claim 5,** Nakao, Glowny, and Appleman fail to disclose that an

edit made by any one of the multiple authors is delayed before being propagated among

the replicates residing at the multiple sites of the computer network. However, Yablon

discloses a delay due to relaying which allows progressive correction of a transmission.

It would have been obvious to one of ordinary skill in the art at the time of the invention

to have a delay due to relaying which would allow progressive correction of a

transmission.

17. **Regarding dependent claim 6,** Nakao, Glowny, and Appleman fail to disclose that an

edit made by any one of the multiple authors is relayed to intervening personnel, and thus

is delayed, before being propagated among the replicates residing at the multiple sites of

the computer network. However, Yablon discloses a delay due to relaying which allows

progressive correction of a transmission. It would have been obvious to one of ordinary

skill in the art at the time of the invention to have a delay due to relaying which would

allow progressive correction of a transmission.

18. **Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakao,
further in view of Glowny, further in view of Olson (USPN 6,802,022 B1—filing date
9/18/2000**

19. **Regarding dependent claim 7,** Nakao and Glowny fail to disclose that an edit made by

any one of the multiple authors is propagated as an atomic transaction among the

replicates residing at the multiple sites of the computer network. However, Olson

discloses in col. 2, line 55—col. 3, line 5 that atomic transactions may be used to prevent

the results of incomplete or partial transactions from subsequent loading. It would have

been obvious to one of ordinary skill in the art at the time of the invention to use atomic

transactions in conjunction with Nakao and Glowny's inventions in order to prevent the

results of incomplete or partial transactions from subsequent loading.

20. **Claims 10 and 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over**

Nakao, further in view of Glowny, further in view of Bays et al. (USPN 6,519,603

B1—filing date 10/28/1999), hereinafter Bays.

21. **Regarding dependent claim 10,** Nakao and Glowny fail to disclose that each author of

the multiple authors is assigned an entity type having associated therewith corresponding

executables that define the role an author can play in creating distributed document.

However, Bays discloses in col. 3, lines 5-35 that the presence of executable data

structures that define roles for an author in order to allow standardized structure of

annotations. It would have been obvious to one of ordinary skill in the art at the time of

the invention to define roles for an author in order to allow standardized structure of

annotations.

22. **Regarding dependent claim 12,** Nakao and Glowny fail to disclose that a subscriber can

view edits made by one or more of the multiple authors. However, Bays discloses in col.

3, lines 5-35 that a reader (which is equivalent to a subscriber) can view edits made by

the authors in order to give a level of credibility to annotations (col. 3, lines 20-25). It would have been obvious to one of ordinary skill in the art at the time of the invention to allow a subscriber to view edits to give a level of credibility to annotations.

23. **Claims 11 and 15-26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakao, further in view of Glowny, further in view of Bays, further in view of Bannon et al. (USPN 5,297,279—filing date 5/30/1990), hereinafter Bannon.**

24. **Regarding dependent claim 11,** Nakao and Glowny fail to disclose that the roles that an author may play in creating the distributed document include: root context author, context author, and content author. However, Bays discloses the levels of context and content as being applicable to authorship, in order to regulate collaboration. It would have been obvious to one of ordinary skill in the art at the time of the invention to use levels of context and content as being applicable to authorship, in order to regulate collaboration. Furthermore, Bannon discloses the use of a root context level in order to organize hierarchical aspects of editing. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a root context level in order to organize hierarchical aspects of editing.

25. **Regarding dependent claim 15,** Nakao discloses (a)(2) computer code for distribution through a communication medium to said root context author said executable code (Nakao is a distributed network application), (b)(5) computer code for propagating content changes from said root context author to all other replicate view nodes at author and subscriber sites (Nakao is a distributed network application), (b)(7) computer code for distributing through a communication medium to said target node said root node

associated executable code (Nakao is a distributed network application) (b)(9) computer code for distributing through a communication medium to said target subscriber said subscriber executable code, (c)(14) computer code for propagating content changes from its own node to all other replicate view nodes at author and subscriber sites (Nakao is a distributed network application), (c)(17) computer code for distributing through a communication medium to said target node said associated executable code (Nakao is a distributed network application), (c)(19) computer code for distributing through a communication medium to said target subscriber said subscriber executable code (Nakao is a distributed network application), (d)(24) computer code for propagating content changes from its own node to all other replicate view nodes at author and subscriber sites (Nakao is a distributed network application), and (d)(27) computer code for distributing through a communication medium to said target subscriber said subscriber executable code (Nakao is a distributed network application); but Nakao and Glowny fail to disclose a system comprising: (a) executable computer code for a root context author generator comprising: (1) computer code for creating root node associated executable code for at least one root context author wherein said root context author is editor type; (b) executable computer code for said root context author comprising: (3) computer code for maintaining and updating a recordation of each node added to a document; (4) computer code for creating an initial user interface wherein said user interface receives and displays the content of said document from other nodes and said interface enables said root context author to enter content edits in an assigned area of said document; (6) computer code for creating root node associated executable code for at least one target node

wherein the type of said target node is selected from the group consisting of a context

author and a content author wherein said context author can administrate and is editor

type and said content author is editor type; (8) computer code for creating subscriber

executable code for at least one target subscriber wherein said target subscriber is not

editor type; (10) computer code for said administration wherein said administration

comprises the ongoing granting and revoking of descendent node privileges, the ongoing

configuration of descendent node user interfaces, and the ongoing configuration of

descendent node supplementary computer code; (c) executable code for said context

author wherein said context author comprises: (12) computer code for maintaining and

updating a recordation of each node added to a document; (13) computer code for a user

interface wherein said user interface receives and displays the content of said document

and said interface enables said context author to enter content edits in the assigned area of

said document; (15) computer code for responding to an administrative request; (16)

computer code for creating node associated executable code for at least one target node

wherein said target node is selected from the group consisting of a context author and a

content author wherein said context author can administrate and is editor type and said

content author is editor type; (18) computer code for creating subscriber executable code

for at least one target subscriber wherein said target subscriber is not editor type; (20)

computer code for said administration wherein said administration comprises the ongoing

granting and revoking of descendent node privileges, the ongoing configuration of

descendent node user interfaces, and the ongoing configuration of descendent node

supplementary computer code; (21) computer code for populating said document at

startup; (d) executable code for said content author wherein said content author

comprises: (22) computer code for maintaining and updating a recordation of each node

added to a document; (23) computer code for a user interface wherein said user interface

receives and displays the content of said document and said interface enables said content

author to enter content edits in the assigned area of said document; (25) computer code

for responding to an administrative request; (26) computer code for creating subscriber

executable code for at least one target subscriber wherein said target subscriber is not

editor type; (27) computer code for distributing through a communication medium to said

target subscriber said subscriber executable code; (28) computer code for populating said

document at startup; (e) executable code for said subscriber wherein said subscriber

comprises: (29) computer code for a user interface wherein said user interface receives

and displays the content of said document; (30) computer code for responding to an

administrative request; (31) computer code for populating said document at startup.

However, Bannon discloses (a) executable computer code for a root context author

generator (in col. 19, lines 55-67, a root context author manager is described) comprising:

(1) computer code for creating root node associated executable code for at least one root

context author wherein said root context author is editor type (Bannon, in col. 19, lines

55-67, a root context author manager is described, it is inherently an editor because it

changes the database); (b) executable computer code for said root context author

comprising: (3) computer code for maintaining and updating a recordation of each node

added to a document (Bannon, in col. 19, lines 55-67, a root context author manager is

described, it inherently updates to the database); (4) computer code for creating an initial

user interface wherein said user interface receives and displays the content of said

document from other nodes and said interface enables said root context author to enter

content edits in an assigned area of said document(Bannon, in col. 19, lines 35-55, a root

context author manager is described, along with its interface functions); (6) computer

code for creating root node associated executable code for at least one target node

wherein the type of said target node is selected from the group consisting of a context

author and a content author wherein said context author can administrate and is editor

type and said content author is editor type (Bannon, in col. 20, lines 1-40, creation of the

root context node involves a context author which is inherently a name manager (col. 19,

lnes 55-60) and hence can administrate); (13) computer code for a user interface wherein

said user interface receives and displays the content of said document and said interface

enables said context author to enter content edits in the assigned area of said document

(Bannon, in col. 19, lines 35-55, a root context author manager is described, along with

its interface functions; however, the interface elements would equally apply to a plain

context author) (23) computer code for a user interface wherein said user interface

receives and displays the content of said document and said interface enables said content

author to enter content edits in the assigned area of said document (Bannon, in col. 19,

lines 35-55, a root context author manager is described, along with its interface functions;

however, the interface elements would equally apply to a content author) and (29)

computer code for a user interface wherein said user interface receives and displays the

content of said document (Bannon, in col. 19, lines 35-55, a root context author manager

is described, along with its interface functions; however, the interface elements would

equally apply to a subscriber). It would have been obvious to one of ordinary skill in the

art at the time of the invention to combine Bannon with Nakao and Glowny because it

would help to manage objects related to structured data. Furthermore, Bays discloses (8)

computer code for creating subscriber executable code for at least one target subscriber

wherein said target subscriber is not editor type (col. 3, lines 5-35, Bays describes the

reader position); (10) computer code for said administration wherein said administration

comprises the ongoing granting and revoking of descendent node privileges, the ongoing

configuration of descendent node user interfaces, and the ongoing configuration of

descendent node supplementary computer code (col. 3, lines 5-35, Bays describes

privileges management), (c) executable code for said context author wherein said context

author comprises: (12) computer code for maintaining and updating a recordation of each

node added to a document (Bays, col. 3, lines 5-35, the nodes are retrieved so they must

be recorded); (15) computer code for responding to an administrative request (Bays, col.

3, lines 5-35, the invention describes an administrative hierarchy); (16) computer code for

creating node associated executable code for at least one target node wherein said target

node is selected from the group consisting of a context author and a content author

wherein said context author can administrate and is editor type and said content author is

editor type(Bays, col. 3, lines 5-35, the invention describes an administrative hierarchy

for collaboration, so the authors can edit); (18) computer code for creating subscriber

executable code for at least one target subscriber wherein said target subscriber is not

editor type (Bays, col. 3, lines 5-35, describes a reader which is equivalent to a

subscriber; (20) computer code for said administration wherein said administration

comprises the ongoing granting and revoking of descendent node privileges, the ongoing

configuration of descendent node user interfaces, and the ongoing configuration of

descendent node supplementary computer code (Bays, col. 3, lines 5-35, the invention

describes an administrative hierarchy); (d) executable code for said content author

wherein said content author comprises: (22) computer code for maintaining and updating

a recordation of each node added to a document(Bays, col. 3, lines 5-35, the nodes are

retrieved so they must be recorded); (25) computer code for responding to an

administrative request(Bays, col. 3, lines 5-35, the invention describes an administrative

hierarchy); (e) executable code for said subscriber wherein said subscriber comprises:

(30) computer code for responding to an administrative request(Bays, col. 3, lines 5-35,

the invention describes an administrative hierarchy). It would have been obvious to one

of ordinary skill in the art at the time of the invention to combine Bays with Nakao,

Glowny and Bannon because it would help to manage annotations for a structured

document. Nakao, Glowny, Bannon, and Bays fail to disclose (11), (21), (26) (28), and

(31) code for populating said document at startup, but it was notoriously well known in

the art at the time of the invention that including code in a program for populating a

document at startup is useful because it initializes the document with meaningful data. It

would have been obvious to one of ordinary skill in the art at the time of the invention to

include code for populating said document at startup because it would initialize the

document with meaningful data. It was further known that read-only access is sometimes

desirable to protect the integrity of a document, it would have been obvious to one of

ordinary skill in the art at the time of the invention to use (26) computer code for creating

subscriber executable code for at least one target subscriber wherein said target

subscriber is not editor type because it would have protected the integrity of a document.

26. **Regarding dependent claim 16,** it is a system that performs the same functions as the

system of claim 15 with the added features of claim 13 and is rejected under similar

rationale.

27. **Regarding dependent claim 17,** it is a system that performs the same functions as the

system of claim 15 with the added features of claim 14 and is rejected under similar

rationale.

28. **Regarding dependent claim 18,** the system of Nakao, as previously noted in the

rejection to claim 1 and, as revealed in the Abstract lines 1-30, is a system that

manipulates valid components of a DTD, and hence the nodes produced by the root

context editor and context editor would be semantically valid parts of a DTD.

29. **Regarding independent claim 19,** it is a system that performs the same functions as the

system of claim 15 and is rejected under similar rationale.

30. **Regarding dependent claim 20,** it is a system that performs the same functions as the

system of claim 15 with the added features of claim 13 and is rejected under similar

rationale.

31. **Regarding dependent claim 21,** it is a system that performs the same functions as the

system of claim 15 with the added features of claim 14 and is rejected under similar

rationale.

32. **Regarding dependent claim 22,** it is a system that performs the same functions as the system of claim 15 with the added features of claim 18 and is rejected under similar rationale.

33. **Regarding independent claim 23,** it is a method that performs the same functions as the system of claim 15 and is rejected under similar rationale.

34. **Regarding dependent claim 24,** it is a method that performs the same functions as the system of claim 15 with the added features of claim 13 and is rejected under similar rationale.

35. **Regarding dependent claim 25,** it is a method that performs the same functions as the system of claim 15 with the added features of claim 14 and is rejected under similar rationale.

36. **Regarding dependent claim 26,** it is a method that performs the same functions as the system of claim 15 with the added features of claim 18 and is rejected under similar rationale.

Conclusion

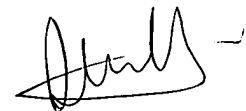The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

USPN 6,563,800 B1 (filing date 11/10/1999)—Salo et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan D. Schlaifer whose telephone number is (571) 272-4129. The examiner can normally be reached on 8:30-5:00, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JS

STEPHEN S. HONG
PRIMARY EXAMINER